

Texas Brine Company, LLC Daily Update – 3/15/13

Fifth Amendment to the Declaration of Emergency and Directive dated 12/7/12 and Amended Fifth Amendment issued on 1/14/13

Per the requirement in the Fifth Amendment, the daily update on progress in implementing all Directives is provided below:

1. Directive 1:
 - a. The temporary geophone installed on 12/14/12 continues to work and generate data which is being reported as required. The work plan required by the Directive was submitted on 12/15/12 with additional information being provided on 12/19/12 in response to DNR's follow up question.
 - b. The vibro-seismic study at the TBC facility with U. of Houston's mini-vibe unit area seismic activity has been completed; The U. of Texas' "T-Rex" vibe truck work is also completed; the temporary geophone array was reinstalled in the 480' geophone well on 1/19/13.
 - c. A permanent geophone plan was submitted to DNR by MEQ on 1/4/13. DNR has approved the permanent geophone array design and it was installed on 2/13/13 and is functioning well as it reports data to the data collection system provided by Nanometrics; A website is under design and commissioning that will allow future access to all passive seismic system information in a more comprehensive and efficient manner.
2. Directive 2a-e (Amended Fifth Amendment): Given DNR's issuance of an amended Fifth Amendment on 1/14/13, the requirements of this Directive have changed. TBC has work underway to address the requirements of Directive 2 a-e.
 - a. 3D seismic planning continues; Land access approval work and field surveying is underway. Survey and drilling work began 02/08/13 and is approximately 91% (Survey) and 98% (Drilling) completed to date; Progress is on schedule with data acquisition expected to begin this weekend. Geophone layout began 3/13/2013 and 1010 stations have been laid out to date.
 - b. OG 1 hanging strings were removed on 1/12/13 & 1/13/13; A cement bond log (CBL) and variable density log (VDL) were completed on 1/15/13; The design of the temporary geophone has been approved by DNR, Shaw, and Itasca and was installed on 2/13/13; The permanent geophone design is underway; The pack-off gland for the cable to the geophone array has a slight seep at the wellhead that ESG is working to resolve; As a result of a conference call with DNR, CB&I, Itasca, and TBC reps on 3/15/13, daily wellhead pressure readings will continue to be taken on OG 1 following hydrocarbon removal, and following the 3D data acquisition period, the temporary geophone array will be removed and a hanging string will be reinstalled to allow continuous brine cavern pressure monitoring at the wellhead; TBC reps will work with DNR, CB&I, and Itasca personnel to design a long term micro-seismic monitoring system for the TBC facility as a replacement for OG 1
 - c. Approval of the EUA from Office of Coastal Management (OCM) was received on 1/15/13 to allow work to upgrade and raise the Rig Road as needed for multiple reasons; Construction of the location for G-03 (1000' geophone well) was completed; Conductor casing was installed on 1/31/13; The 13-3/8" casing was cemented in on 2/6/13; Drilling of the well was completed to a depth of 1100 feet on 2/13/13; The 7" casing was installed and cemented in place on 2/14/13 and a CBL was performed on 2/20, a PDK log was performed 3/5/13; A proposed work plan for the permanent

geophone array was submitted on 2/20/13 for review by DNR, CB&I, and Itasca and was approved on 2/27/13; Follow up is underway on quotes from possible suppliers for this permanent geophone array .

- d. Modifications to the pressure monitoring systems for OG 1, OG 2, OT 9, and OT 10 brine wells have been made and cavern pressures were reported to DNR and AP OEP starting 1/15/13 and will continue.
- e. OG 2-VSP was completed on 1/14/13 and is being analyzed; The sonar survey was conducted on this well on 1/10/13; A CBL was done on this well on 1/15/13; The work-over on this well has been completed; OCC and DNR agreed to return the well to service which was done on 1/25/13.

3. Directive 3:

- a. TBC and its consultant submitted the work plan for the additional MRAA monitor wells on 12/28/12; Comments were received from DNR on 1/5/13 and are being reviewed. A revised work plan was submitted on 1/10/13. DNR responded with comments on Installation of the additional monitor wells on 1/12/13.
- b. Installation of the MRAA 03 D&M wells began on 1/14/13 and for location MRAA 01 D&M wells on 1/16/13; MRAA 03 was plugged on 1/21/13 as a result the changes on OG 3 well pad on 1/18/13 and 1/19/13; An engineering assessment on the stability of the OG 3 well pad was completed; MRAA 01 D&M wells have been installed and are now ready to be developed and sampled; MRAA 02D casing was grouted in and is being developed, MRAA 02M casing and screen was set on 2/27/13, first stage of grout has been set and is now being developed; MRAA 03D was drilled to a depth of 347' on 3/10/13, logged on 3/11/2013, had the screen set 3/12/2013, and is now being developed; DNR granted a 30 day extension of the 1/31/13 for this Directive; Due to delays in installing MRAA 02 D &M resulting from G-03 drilling and the upgrade of the access road; An additional deadline extension to 4/1/13 was approved by DNR on 3/4/13.

4. Directive 4:

- a. TBC and consultants submitted a work plan required by this Directive on 12/28/12.
- b. The VSP on OG 3A was completed on 1/12/13; The VSP on OG 1 was completed on 1/16/13; Results from both were analyzed with results being presented to DNR, CB&I, Itasca, and AP OEP officials during the weekly collaborative conference call on 3/5/13.

5. Directive 5:

- a. TBC submitted the first daily report on 12/12/12 for OG 1 pressure monitoring as required. These will be submitted daily going forward

6. Directive 6:

- a. TBC submitted the first daily report on 12/12/12 for OG 2 pressure monitoring as required. These will be submitted daily going forward.

7. Directive 7:

- a. The professional engineer's report was submitted 02/06/2013.

B.E. Martin
VP Operations
Texas Brine Company, LLC

